

ABSTRACT OF THE DISCLOSURE

1 Power dissipation of a semiconductor integrated circuit
2 chip is reduced when it is operated at an operating voltage of
3 2.5 V or below. A switching element is provided in each
4 circuit block within the chip. Constants of the switching
5 element are set so that leakage current in each switching
6 element in their off-state is smaller than the subthreshold
7 current of MOS transistors within the corresponding circuit
8 block. Active current is supplied to active circuit blocks,
9 while switching elements of non-active circuit blocks are
10 turned off. Thus, dissipation currents of non-active circuit
11 blocks are limited to leakage current value of corresponding
12 switching elements. Thus, the sum of dissipation currents of
13 non-active circuit blocks is made smaller than the active
14 current in the active circuit blocks. As a result, power
15 dissipation in the semiconductor integrated circuit chip can
16 be reduced even in the active state.